

comorbidity) factors. The sample AF represents the expected proportion by which the inactivity frequency could be reduced if the risk factor were totally absent, but it does not imply cause and effect.

Results: Almost half of these participants with knee OA were physically inactive. Modifiable factors were evaluated from two perspectives. The first perspective identifies factors that were associated with physical inactivity at the level of the individual based on odds ratios (OR). Controlling for descriptive factors, inadequate dietary fiber intake (OR = 1.6, confidence interval [CI]: 1.2, 2.2), being overweight (OR = 1.8, CI: 1.2, 2.5) or obese (OR = 3.9, CI: 2.6, 5.7), severe WOMAC knee dysfunction (OR = 1.9, CI: 1.3, 2.8), and severe WOMAC pain (OR = 1.7, CI: 1.1, 2.5) significantly were related to inactivity. However, moderate WOMAC pain (OR = 1.3, CI: 0.9, 1.8) and moderate WOMAC knee dysfunction (OR = 1.4, CI: 1.0, 1.9) were not significant. A second public health perspective examined the influence of each modifiable factor on inactivity by estimating the attributable fractions (AF) for the sample. Risk factors with significant AF were being overweight or obese (AF = 23.8%, CI: 10.5%, 38.6%) and inadequate dietary fiber (AF = 12.1%, CI: 0.1%, 24.5%) controlling for all descriptive and modifiable factors.

Conclusion: Pain and poor function are commonly viewed as barriers to being physically active for adults with knee OA. Being overweight/obese and unhealthy dietary factors may be surrogates for an unhealthy lifestyle. All components should be considered in designing physical activity and lifestyle interventions that target arthritis populations with low activity levels.

325

PREDICTORS OF PROGRESSION OF KNEE OA: OSTEOARTHRITIS INITIATIVE

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Purpose: Risk factors for developing knee osteoarthritis are well established but predictors of knee osteoarthritis progression have been inconsistent and vary by cohort and by definition of progression. We sought to evaluate predictors of knee progression in the OAI.

Methods: 941 Osteoarthritis Initiative participants diagnosed with symptomatic OA at baseline, defined as the combination of definite tibio-femoral osteophyte formation (OARSI grade 1–3) and frequent knee symptoms including pain, aching, or stiffness on most days of a month in the past year at baseline in one or both knees. Our analysis used one knee per person: the most severely affected knee (higher KL grade). Radiological evidence of JSW narrowing at 0.275 cm from the medial tibial was measured at baseline and at two years using a semi-quantitative computerized algorithm. Progression was defined as reduction in JSW by 0.7 mm, based on guidelines set forth by the collaborative initiative of the Osteoarthritis Research Society and the Outcome Measures in Rheumatoid Arthritis Clinical Trials (OARSI-OMERACT). Results: 189 knees progressed over two years and 752 had no change or improved. Univariate predictors of progression at $P \leq 0.20$ were: Race, BMI class, PASE score, KL grade, frequent knee symptoms, VAS pain, KOOS pain, KOOS qoL, KOOS symptoms, KOOS function, WOMAC pain, number of co-morbid conditions. Multivariate predictors of knee progression at $p < 0.05$ were only: African American race OR = 2.30, 95% CI 1.40–3.79. Age, gender, BMI, KL grade, symptoms, function, extensor strength did not predict progression in this analysis.

Conclusion: African American race independently predicted OA progression based upon medial joint space width narrowing in the Osteoarthritis Initiative at two years. Other proposed risk factors did not. Other definitions of progression and longer duration of follow-up might provide different results.

326

CONSULTATION PREVALENCE OF OSTEOARTHRITIS IN UPPER AND LOWER LIMBS IN SOUTHERN SWEDEN

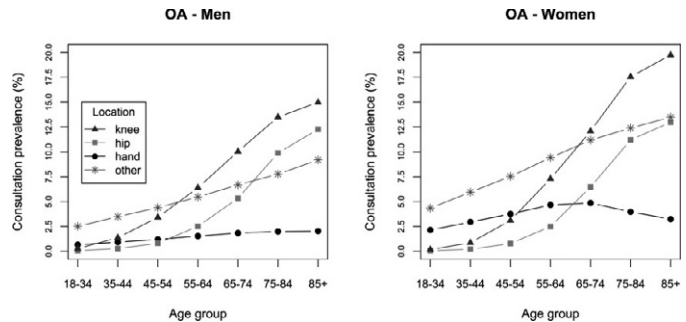
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Purpose: To estimate the prevalence and age and sex patterns of subjects with extremity OA having led to doctor consultation.

Methods: The Skåne Health Care Register (SHCR) is a legislative, mandatory register based on physicians' International Classification of Diseases (ICD) 10 diagnostic codes. The register covers all in- and

outpatient health care in southern Sweden (total population 1.2 million). We identified all adult (18 years of age or older) patients having received the diagnosis of knee OA (M17), hip OA (M16), hand/wrist OA (M15.1, M15.2, M18, M19.0D, M19.1D or M19.2D), and OA in other locations, i.e. elbow, foot, shoulder, or other joints not incl. the spine (M19 different from M19.0D, M19.1D and M19.2D) or polyarthrosis (M15 different from M15.1 and M15.2) during the years 1998 until 2009. We obtained point estimates of consultation prevalence by Dec 31st 2009 by cross referencing with the population register to exclude subjects who had relocated from the county or were deceased. The total adult population per Dec 31st 2009 was used as the denominator, reduced with 15% to compensate for the loss of patients exclusively seen by private practitioners whose diagnostic coding is not yet forwarded to the SHCR.

Results: The adult consultation prevalence of OA in extremities (any location) was 10.0% (95% CI: 9.89%; 10.02%), 8.1% (95% CI: 7.98%; 8.15%) for men and 11.8% (95% CI: 11.68; 11.88) for women. The most common location was knee OA with a consultation prevalence of 5.0%, followed by OA of other joints – 3.5%, OA of the hip – 2.5%, and hand/wrist OA with the consultation prevalence of 1.4%. The consultation prevalence in population aged 65 or more was 27.1%, 22.3% for men and 30.9% for women. The age and sex-specific patterns are displayed in the graph. Of subjects who had consulted with extremity OA 19.3% had OA diagnosed in more than one location, knee OA combined with other OA being the most common combination (5.9%). The majority of patients (75.1%) had been diagnosed at least once in outpatient specialist or inpatient care.



Conclusions: The high doctor consultation prevalence of OA in extremities, 10.0% of all adults, 27.1% of all above 65 years of age, shed light on the burden on the health care system and warrants concern with a steadily ageing and increasingly obese population.

327

DIFFERENCES BETWEEN MEN AND WOMEN OBSERVED FOR HALLUX VALGUS AND FOOT PAIN IN RELATION TO LOWER EXTREMITY LIMITATIONS: A STUDY OF COMMUNITY-DWELLING OLDER ADULTS

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Purpose: Hallux valgus, as a structural foot disorder, may affect the base of support in older adults, and thus could also affect lower extremity physical abilities. Further, it is unknown whether foot pain contributes to lower extremity physical limitation along with, or separately from, hallux valgus. The purpose of this study was to investigate hallux valgus and foot pain and their associations with lower extremity physical limitations in community-dwelling older adults.

Methods: This cross-sectional study included 2208 ambulatory adults, contributing 4414 feet, from the population-based Framingham Study. We used a validated foot exam done by trained examiners with criteria to assess HV and foot pain. Hallux valgus was present if the angle of the hallux toward the lesser toes was observed to be $> 15^\circ$. Foot pain (y/n) was queried: "On most days, do you have pain, aching or stiffness in either foot?" Each foot was categorized into four groups based on foot pain and hallux valgus status: 1) foot pain and no hallux valgus, 2) no foot pain and hallux valgus, 3) foot pain and hallux valgus, and 4) neither foot pain nor hallux valgus. Lower extremity physical limitation was assessed using the subject's ability to climb stairs and to stand for 15 minutes. A report of difficulty, inability, or instruction from a physician to avoid the activity was considered to be a limitation (y/n). Age, sex, and body